

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (Currently Amended): A method of the production of a nanoparticle which comprises a step of forming a nanoparticle including a hydroxide of a metal ion in a cavity part of a protein apoferitin, by mixing a first solution and a second solution, wherein said first solution contains a protein having a cavity part inside apoferitin, an alkaline buffer solution, and a metal ion selected from the group consisting of a nickel ion (Ni^{2+}), a chromium ion (Cr^{2+}) and a copper ion (Cu^{2+}), and said second solution contains carbonate ion and/or hydrogen carbonate ion, wherein pH of said solution after mixing is 8 or greater and 9 or less.

2 (Canceled)

3 (Canceled)

4 (Previously Presented): The method of the production of a nanoparticle according to claim 1, wherein said metal ion is a nickel ion.

5 (Previously Presented): The method of the production of a nanoparticle according to claim 1, wherein said metal ion is a chromium ion.

6 (Previously Presented): The method of the production of a nanoparticle according to claim 1, wherein said metal ion is a copper ion.

7 (Previously Presented): The method of the production of a nanoparticle according to claim 1, wherein pH of a solution after mixing is approximately equal to a precipitation point of a hydroxide of said metal ion.

8 (Canceled)

9 (Previously Presented): The method of the production of a nanoparticle according to claim 1, wherein a third solution containing an ammonium ion is further mixed at said step.

10 (Previously Presented): The method of the production of a nanoparticle according to claim 9, wherein pH of said solution after mixing is greater than 8.3 and equal to or less than 8.65.

11 (Canceled)

12 (Canceled)

13 (Currently Amended): The method of the production of a nanoparticle according to claim 1, further comprising a step of eliminating the protein apoferritin by a heat treatment after forming said nanoparticle.

14 (Canceled)

15 (Canceled)

16 (Previously Presented): The method of production of a nanoparticle according to claim 1, wherein said second solution comprises carbonate ion and/or a hydrogen carbonate ion produced by bubbling carbon dioxide thereto.